

# Message from the London Amateur Radio Club



Promoting Amateur Radio in London  
And surrounding area since 1920

May 8, 2011

## L.A.R.C. Executive

### President

Doug Elliott, VA3DAE

### Vice-President

David Lambert, VE3KKG

### Past President

Doug Tompkins, VE3IDT

### Treasurer

Brian Bouckley, VA3ATB

### Secretary

Ruth Dahl, VE3RBO

### Director

Ann Rundle, VA3EOR

### Director, Membership

John Visser, VA3MSV

### Director

Mike Watts, VE3ACW

### Non-Voting

### Director, ARES & CANWARN

Brett Gilbank, VE3ZBG

### Appointments

### LARC Repeater

### Coordinator

Brad Seward, VE3NRJ

### Repeater

### Operator/Programmer

David Young, VE3EAY

### Field Day Coordinator

Dave Lambert, VE3KKG

### Webmaster

Doug Elliott, VA3DAE

### Newsletter Editor

John Visser, VA3MSV

### Auditors

Rob Hockin, VA3HO  
William Clothier, VE3BCU

## Next Meeting Topic

The next **LARC meeting** will be on **Thursday, May 12, 2011** at 7:30 PM. Our speaker will be **Steve Beatty**, the Emergency Management Ontario (EMO) Field Officer for the St. Clair Sector. Steve will be presenting the inside story of the emergency response to the **Highway 402 blizzard** that stranded 300+ motorists for over 24 hours last December.

## National Amateur Radio Emergency Database (NARED) now ready for applicants

May 4, 2011

I am pleased to advise that the National Amateur Radio Emergency Database is ready to receive applicants.

If you are interested in being considered, have a high level of Emcomm training or are willing to update, please contact the undersigned by e-mail to receive an information package, release of liability form and application.

Once you have submitted your application, it will be reviewed by our National Emergency Coordinator Ken Oelke, VE6AFO and Manager NARED Merv Halvorsen, VA3TSA.

Thank you for your interest.

73

**Doug Mercer, VO1DTM CEC**

Radio Amateurs of Canada

Vice President Field Services

## Next Meeting is Where and When?

**Reminder: The next monthly L.A.R.C. meeting on May 12, 2011 at 7:30 pm**

All meetings are normally located at St. Judes Anglican Church, 1537 Adelaide Street North at Fanshawe Park Road East in London, Ontario.

The meetings are **normally** held on the second Thursday of the month at 7:30 pm EST during the months of September to June.

Next Meeting will be June 9, 2011. This meeting will be a presentation by Bob Rice, VE3HKY about his new antenna.

## Area Repeaters

### LARC Repeaters

#### London

VA3LON 147.060 + 114.8Hz

VE3MGI 145.390 - 114.8Hz

### Sort Repeaters

#### London

VE3TTT 147.180 + 114.8Hz  
Echolink Node 10741

VE3SUE 444.400 + 114.8 Hz  
IRLP Node 2400

VE3TTT 442.200 + D-Star

#### Ipperwash

VE3TCB 146.940 - 114.8 Hz  
Linked to VE3SUE

#### Grand Bend

VE3SRT 442.050 + 114.8 Hz  
Linked to VE3SUE

### Other Area Repeaters

#### London

VA3SIX 53.470 - 114.8 Hz

VE3OME 145.450 - 114.8 Hz  
CANWARN

VA3FEZ 444.100 + 114.8 Hz

#### Grand Bend

VE3RGB 146.760 + 173.8 Hz

#### Stratfordville

VE3DPL 146.655 - 131.8 Hz

#### St. Thomas

VE3STR 147.330 + 114.8 Hz  
Echolink Node: 72886

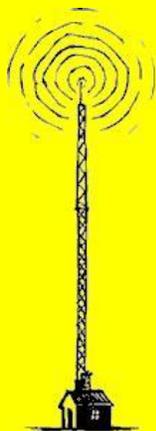
VE3STR 443.825 + 114.8 Hz  
IRLP Node: 2482

#### Goderich

VE3OBC 146.910 - 123.0 Hz

#### Whitechurch

VE3WWD 443.075 + 123.0 Hz



If you have a repeater that should be listed here, please forward the information to John Visser, VA3MSV at [va3msv@hotmail.com](mailto:va3msv@hotmail.com) and I'll add it to the list.

## Membership Certificates

The Club has created membership certificates for its current members. You can see your own certificate at the following link. <http://www.larc.ca/member-list.htm>

Simply click on your surname and it will bring up a PDF of your certificate suitable for printing.

## Flaunt Your Face – Show Your Shack

In our hobby it's not always easy to put a face to all the fellow hams you talk to on the air. To help us all figure who's who, LARC invites its members to submit digital photos of yourself and/or your shack to be published on the membership page of our website. Purely voluntary of course, and if you prefer you can submit just one (depending on whether you think your face or your shack is more presentable).

How will it work? On the membership page, we'll attach your own picture where your first name appears, and the picture of your shack to your callsign. See the entry for Doug Elliott, VA3DAE for an example.

How do you submit your pictures?

Just email them to the LARC site webmaster address, which is: [webmaster@larc.ca](mailto:webmaster@larc.ca)

## Mutual Aid

Would you be willing to answer some questions if a fellow ham needed some advice? Got a problem you can't figure out? Want to try something new but need someone to show you the ropes? Check out our new **Mutual AID page** (<http://www.larc.ca/mutual-aid.html>), a new way to get people who are looking for assistance together with the folks who can help supply the answers. **Let us know** what you think of this new facility.

## Membership Report

Currently the membership is at 120. As of the beginning of the 2010/2011 year we have gotten 19 new members to the club. Of the 17 Honorary Members brought in from the L.S.R.C., 3 have paid for the current 2010/2011 year. Unfortunately 3 past members of the club became a Silent Key this year.

## Nets



### Daily

#### Trans Provincial Net

7.055 MHz 7:00 am – 5:00 pm

#### London Senior's Net

146.400 MHz 7:00 pm – 7:30 pm

### Sunday

#### Swap Net

7.055 MHz LSB 12:00 pm

#### ARES Ontario Net

7.153 MHz 1:00 pm

7.055 MHz 3:00 pm

3.742 MHz 7:15 pm

IRLP Reflector 9005 8:00 pm

### Monday

#### LARC 2m Net

147.060 MHz + 8:00 pm

### Wednesday

#### ARES Net

145.450 + VE3OME 7:30 pm

#### ARES Ontario Net

IRLP Reflector 9005 8:00 pm

### Thursday

#### PROCOMM Net

147.180 + VE3TTT 8:00 pm

444.400 + VE3SUE 8:00 pm

### Friday

#### Tech Net

147.180 + VE3TTT 8:00 pm

444.400 + VE3SUE 8:00 pm

### Saturday

#### VE3TTT 2m Net

147.180 + VE3TTT 7:30 pm

444.400 + VE3SUE 7:30 pm

146.940 - VE3TCB 7:30 pm

442.050 + VE3SRT 7:30 pm

# 2011/2012 L.A.R.C. Executive Elections

It is that time of year again for us to think about the lineup for the club's executive members for 2010-2011.

Every May we decide who will be responsible for the handling of the money, physical resources, and determining the future direction of the club.

The club's executive requires at least 7 members each year and if you are interested, we request that you make yourself available one night per month to go over club business.

Some of us have been on the executive for several years and enjoy the experience.

We have some simple rules

1. Any current member of the club can request to be a member of the club's executive and added to the ballot.
2. Only members in good standing can vote (must be a paid member)
3. We must have a quorum (at least 25 members in good standing) in order to hold a valid election.

Some of the activities that require planning, coordination or at least some monthly discussions: Monthly meeting topics, fund raising, flea market, field day, repeaters & other equipment, extra activities.

We currently meet the 4th Thursday of the month from 7:30 pm to about 9:00 pm. All club members are invited to attend any executive meeting. If you have some interest but are unsure, and want to come and see what we do, just check with one of the executive as to where we are meeting.

The next page is a snip from the club's by-laws that specifically deal with the election process.

If you have a Net that should be listed here, please forward the information to John Visser, VA3MSV at [va3msv@hotmail.com](mailto:va3msv@hotmail.com) and I'll add it to the list.

## Upcoming Events

Thu., May. 12, 2011

### L.A.R.C. Meeting

7:30 PM - St. Judes Anglican Church,  
1537 Adelaide Street North, London,  
ON

Sun., Jun. 5, 2011

### [Central Ontario Hamfest & Fleamarket](#) – Guelph ARC & Kitchener-Waterloo ARC

Located at the Waterloo Regional Police Association Recreation Centre  
R.R. 2, 1128 Rife Rd. Beside Hwy 401,  
between exits 268 & 275  
Location: 43.344939, -80.418376

Thu., Jun. 9, 2011

### L.A.R.C. Meeting

7:30 PM - St. Judes Anglican Church,  
1537 Adelaide Street North, London,  
ON

Sat., Jun. 25, 2011 –

Sun., Jun 26, 2011

### Field Day – Various Amateur Radio Clubs

Check with your local club for more details about what they are doing for Field Day.  
L.A.R.C. Coordinator – Dave Lambert, VE3KGG

Sat., Jul. 9, 2011

### [Ontario Hamfest](#) - Burlington Amateur Radio Club

Milton Agricultural Fairgrounds, Milton, Ontario

Sat., Jul. 23, 2011 –

Sun., Jul. 24, 2011

### [Rona MS Bike Tour](#) – Multiple Sclerosis Society of Canada – Ontario Division

Grand Bend to London to Grand Bend  
L.A.R.C. Coordination – Doug Elliott, VA3DAE

Sat., Aug. 20, 2011

### [Hamfest 2011](#) - Brantford Amateur Radio Club

Held in the Burford Fairgrounds, 6 Park Ave., Burford, Ontario

Sun., Sep. 25, 2011

### [L.A.R.C. 34<sup>th</sup> Annual Flea Market](#) - London Amateur Radio Club

Held in the Western Fairgrounds Special Events Building, London, Ontario

If you have an upcoming event that you would like to have listed here, please forward the information to John Visser, VA3MSV at [va3msv@hotmail.com](mailto:va3msv@hotmail.com) and I'll add it to the list.

# 2011/2012 L.A.R.C. Executive Elections continued

## *from the LONDON AMATEUR RADIO CLUB INCORPORATED - BY-LAW #1*

### 3. Board of Directors

3.1 The day-to-day affairs of the Corporation shall be arranged by a Board of Directors composed of 7 selected Directors, 1 non-voting Director appointed by the Amateur Radio Emergency Service (A.R.E.S.) and the Past President of the Corporation.

3.3 To be eligible to stand for election to the Board of Directors one must be a member in good standing for at least 30 days prior to the Annual Meeting at which members of the Board of Directors will be elected.

***This year's Annual Meeting will be held May 13, 2010***

3.4 A Nominating Committee shall be struck by the President at least 90 days prior to the Annual Meeting and it shall begin its activities immediately upon being appointed.

3.4.1 The Committee shall be composed of three members in good standing. The Past President shall be the Chairperson of the Committee.

3.5 The recommendations of the Nominating Committee shall be presented to the Board of Directors. The Board shall cause such report to be published in the L.A.R.C. Newsletter, which will be sent to all members in good standing as notice of the Annual Meeting. Such report shall also outline the procedure pertaining to additional nominations.

3.6 Additional nominations may be received by the Secretary up to 12 hours prior to the Annual Meeting if submitted by a member in good standing supported by the written agreement of 4 other members and the written acceptance of the nominee.

3.7 The election of the Board of Directors shall take place at the Annual Meeting of LARC. The Directors shall be elected by a simple majority vote of the members. The Directors shall take office on July 1 of that year.

Please contact the L.A.R.C. Secretary Ruth Dahl, VE3RBO, if you have any nominees or questions. You can reach me at [ragann61@hotmail.com](mailto:ragann61@hotmail.com).

## **RAC Bulletin 2011-009E - Setting the record straight regarding the RAC Ontario Section bulletin for April 23, 2011.**

May 1, 2011

Recently, the content of the above bulletin was sent to me for review. The text of the bulletin clearly, states that the current Ontario Emcomm project, ECOA, is an 'integrated partnership with the ARES Field Service.'

I would like to state to all that the above statement is false, and creates the perception that the Radio Amateurs of Canada Field Service has been involved in the process. Again, this is not the case.

The Radio Amateurs of Canada Field Service is happy to support and respect all Canadian Emcomm efforts no matter what the affiliation. We encourage support of the Field Service ARES program, but fully support and respect the work of Emcomm groups like ECOA, PERCS and others.

The main focus of the RAC Field Organization since November 2010 has been two key projects. The 'ARES Review Project' and following the March 24, 2011 Board meeting, the 'Implementation of a full

new Field Organization'. Both of these projects are in full swing, with more than 30 volunteers meeting by teleconference regularly to ensure that the Radio Amateurs of Canada continues to be the 'go to' national voice of Canadian Amateurs.

This work has taken many volunteer hours, and although I won't name them, I would like to say 'thank you' to our National Secretariat, National Advisors, Special Advisors, Working Group Chairmen, Working Group members and everyone who continues to help see these projects succeed. Thanks guys - you know who you are.

I hope that the above clarification is helpful to the many RAC members who have e-mailed me with concerns.

73

Doug Mercer, VO1DTM  
Vice President Field Services  
Radio Amateurs of Canada

## **Proposals And Changes To The Spectrum In Canada Would Affect The 220 To 222**

### **Proposals and Changes to the Spectrum in Certain Bands Below 1.7 GHz**

#### **1. Introduction**

The purpose of this paper, announced in DGTP-004-05, is to make provisional and proposed changes to allocations in the *Canadian Table of Frequency Allocations*, and to the spectrum utilization of certain frequency bands below 1.7 GHz for several radio applications.

Spectrum accommodations are proposed or made for radio applications such as multi-use radios (MURS), trunked mobile, fixed wireless access applications and medical and utility telemetry applications.

Gazette Notice DGTP-004-05 invites interested parties to submit their comments to the Director General, Telecommunications Policy Branch, by January 25, 2006 for provisional decisions and by April 19, 2006 for all policy proposals.

#### **2. Background**

The demand for spectrum below 1.7 GHz for wireless services, particularly in major urban areas, continues to grow unabated. The Department has been approached by several

parties to access spectrum for a wide range of new radio applications. For example, new mobile applications are anticipated for public safety, commercial and utility operation as well as new consumer radios. New fixed applications include medical and utility telemetry such as wireless monitoring in hospitals and health care facilities, automatic meter reading (AMR) and utility line load management. Interest has also been expressed to designate some unused and reserve spectrum in bands in the 900 MHz range for mobile and fixed wireless access (FWA) applications including broadband access. There is also a demand to align utility telemetry and medical telemetry applications with those in the United States.

Since the last major review of frequency bands below 896 MHz in 1995<sup>1</sup>, demand has continued for more spectrum for a range of new radio applications including public safety. The Department has had to extensively manage the land mobile bands and introduce a narrow band redeployment of these bands to release

sufficient frequencies for spectrum users. Also, a number of new radio service applications have been identified for spectrum accommodation.

### **3. Provisional Allocation Changes in the Frequency Bands 216–220 MHz and 220–225 MHz**

The Department proposes provisional changes to the *Canadian Table of Frequency Allocations* in the bands 216–220 MHz and 220–225 MHz.

#### **3.1 Discussion**

In 1993, the Department consulted on its spectrum policy for the range 30–960 MHz. Among the bands discussed was the sub-band 220–222 MHz (part of the band 220–225 MHz) and its potential reallocation from the amateur service to the mobile and fixed services. At the time, the U.S. had reduced the spectrum of the amateur service in the band 220–225 MHz and reallocated the sub-band 220–222 MHz to the mobile and fixed radio services. This was due to an urgent need for spectrum for mobile service requirements as well as to make more efficient use of this spectrum.

In Canada, given the need then for additional mobile spectrum and the benefit of aligning amateur spectrum for long-haul communications, there was a rationale to consider the same allocation changes. However, at the time the availability of narrow band mobile radio equipment had just emerged and the U.S. had just begun to licence radio systems for a range of radio applications. The potential success of these applications was unknown. As a result, there was no immediate interest. The amateur radio community, however, was opposed to the re-allocation of part of the band 220–225 MHz, as it anticipated significant usage growth in the band.

In December 1999, a Canada/U.S. sharing arrangement was concluded concerning the use of the sub-band 220–222 MHz in order to secure appropriate spectrum along the Canada/U.S. border for the future evolution of radio services. This arrangement set aside 100 kHz of paired spectrum for the exclusive use of the amateur service within Canada and along the border. The arrangement was judged necessary because the U.S. had re-allocated the sub-band 220–222 MHz to mobile and fixed services and were well advanced in deploying radio systems along the border. This arrangement enabled the official sharing of the band along the Canada/U.S.

border and for different radio service uses to co-exist.

Since the early 1990s, there have only been one or two amateur repeater stations making light use of the sub-band 220–222 MHz. Most of the amateur use of the 220–225 MHz band has been concentrated in the spectrum between 222–225 MHz.

The use of the 220 MHz band is very light, in comparison with amateur radio use at the more popular 144 MHz and 420 MHz bands. There is an amateur emergency measures organization (EMO) network operating in the Maritime provinces between 220 and 224 MHz, but only one channel pair is in use. The majority of radio repeaters operate in a 1 + 1 MHz paired band configuration. In this band plan, the receive channels for the repeater stations are assigned in the sub-band 222.31–223.37 MHz with corresponding transmit channels assigned in the sub-band 223.91–225 MHz. It is reasonable to operate 3 or more repeaters in each large city across Canada in the band 222–225 MHz with well-coordinated deployment within frequency and distance separations.

The Department studied the number of repeater installations in the band 222–225 MHz to estimate the level of spectrum use over the last ten years or so. When comparing the number of repeaters from 1995 to now, there have been some decreases in certain areas and some increases in others. In British Columbia, the number increased from 5 to 11 repeaters. The Prairie provinces saw a decrease from 4 to 3 repeaters. In Ontario, the decrease was from 15 to 8 repeaters. Quebec and the Maritime provinces had a increase of 2 repeaters each. However, based upon the projection that 3 or more repeaters could be accommodated in each large city, and assuming there will be moderate spectrum utilization, the Department is of the view that there is sufficient spectrum to accommodate the amateur service in the band 222–225 MHz for the medium to long term (see Annex 1).

Today, there continues to be a high demand for mobile spectrum below 1 GHz. The Department has received representations on the pressing need for the sub-band 220–222 MHz for mobile service and other radio applications. Among the applications are those which accommodate the communications of public safety, railways,

utilities, government and other operations. These needs, combined with the availability of cost-effective radio equipment, require the Department to reconsider the use of this band. There are many manufacturers supplying equipment in the band 220–222 MHz in North America and the international market.

The Radio Advisory Board of Canada (RABC) established a working group to study how the sub-band 220–222 MHz could be re-allocated to be aligned with the the U.S. and best be utilized. The RABC working group was made up of representatives from the Radio Amateurs of Canada, the railways, public safety, utilities, commercial radio service providers and equipment manufacturers. A set of recommendations was submitted to the Department to re-allocate the band 220–222 MHz to mobile and fixed services due to the growing need for new spectrum (see Annex 2). The Radio Amateurs of Canada participated actively in the working group, gaining an appreciation for the need to find new mobile spectrum and expressing their views over the band re-allocation. In the past few months, the wireless industry through an RABC committee, has been developing technical standards, a frequency plan and proposals for the designation of national frequencies and particular radio applications in the band 220–222 MHz.

The use of the band 220–222 MHz is already well deployed in the U.S. with over 36,000 commercial and 4,200 private radio assignments. The high level of radio system roll out in this band and the critical mass of radio equipment in use, have generated sufficient interest for Canada to open this spectrum for mobile and fixed service use and align it with the U.S. In addition, the current Canada/U.S. sharing arrangement is sufficiently flexible to enable Canada to deploy new radio systems and thus meet socio-economic needs.

In summary, re-allocating the frequency 220–222 MHz band to mobile and fixed use would open important spectrum to meet the needs of radio applications such as public safety, railways, utility telemetry and other operations. Canadian and U.S. use of this spectrum would be harmonized and would result in a common North American radio equipment market.

### 3.2 Provisional Allocations in the Bands 220–222 MHz and 219–220 MHz

In light of the public interest to open new spectrum for mobile and fixed radio services, the benefit of aligning this spectrum in a North American context, making a more efficient use of the spectrum and the public consultation carried out by the wireless industry (under the RABC), the Department is of the view that making provisional allocation changes is justified.

The Department is, herein, making provisional allocation changes in the sub-band 220–222 MHz, as follows:

- The amateur service allocation is reduced from primary to secondary radio service status.
- The mobile and fixed services are allocated on a primary basis.
- Canadian footnote C11 will permit limited operation of the amateur service on a secondary basis.

To further harmonize with the U.S., the Department considers it appropriate to permit amateur use in the frequency band segment 219–220 MHz on a secondary basis (i.e. no-protection, no-interference basis). Amateur use of the band would be permitted, by the Department under exceptional circumstances such as assisting in community disaster relief efforts. Furthermore, in recognition of the need to continue accommodating the amateur service and aligning the spectrum in a North American context, the Department is making a provisional frequency allocation change in the sub-band 219–220 MHz, as follows.

#### Canadian Table MHz

216–220	FIXED LAND MOBILE 5.242 MARITIME MOBILE <u>Amateur C11</u>
220- 222	<u>FIXED</u> <u>MOBILE</u> AMATEUR <u>Amateur C11</u>
222–225	AMATEUR

**ADD C11** In the band 219–220 MHz, the amateur service is permitted on a secondary basis. In the band 220–222 MHz, the amateur service may be permitted in exceptional

circumstances on a secondary basis to assist in disaster relief efforts.

**5.242** Additional allocation: in Canada, the band 216–220 MHz is also allocated to the land mobile service on a primary basis.

### 3.3 Implementation of Spectrum Allocation Changes

Given the public discussion carried out over the past two years on the need to re-allocate the sub-band 220–222 MHz for mobile and fixed services, the availability of spectrum capacity in the band 222–225 MHz and the accommodation being made in the sub-bands 219–220 MHz and 220–222 MHz for the amateur service, the

Department is making these frequency allocation changes provisional. All the information presented shows that this will advance the public interest and make a greater and more efficient use of the spectrum to meet pressing mobile service needs.

Thirty days after the release of this document these frequency allocation changes will be implemented for the bands 216–220 MHz and 220–222 MHz, unless the Department receives compelling arguments to the contrary.

<http://www.ic.gc.ca/eic/site/smt-gst...g/sf09625.html>

## 'CQ EGYPT' Amateur Radio Magazine

May 5, 2011



The Egyptian Radio Amateurs Society (ERASD). One of the foremost goals is providing educational programs and materials to promote amateur radio and develop the scientific and technical skills of the Egyptian and Arab youth.

In this context, ERASD is currently issued an online magazine focused on simplifying science and technology to youth in general, and more particularly in areas related to amateur radio and satellite.

The Magazine articles will be mix English and Arabic

'CQ EGYPT' Amateur Radio Magazine. The May issue is NOW on-line at this link <http://erasd.net/CQSUAMATEURRADIOMAGAZIN.aspx>

## The Space Shuttle

Wednesday, April 20, 2011



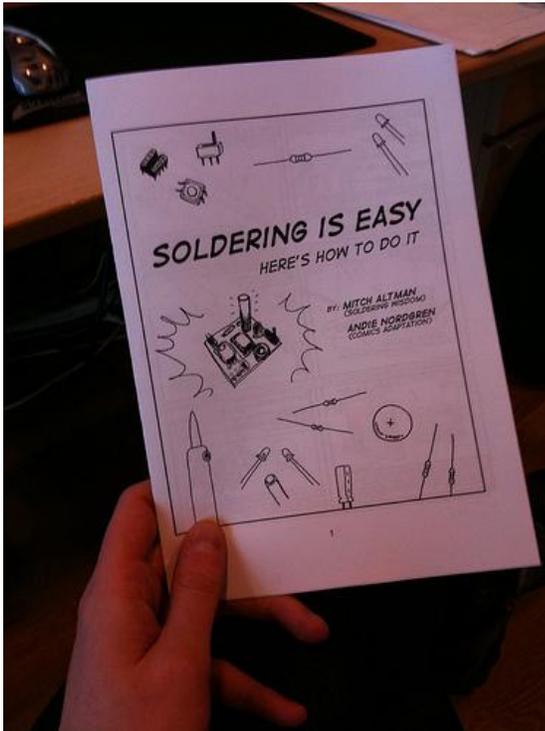
**William Shatner** narrates a look back at how the idea for the space shuttle was born; it also details what needs to happen for a space shuttle mission to take place.

Watch the video at <http://www.youtube.com/watch?v=rIG7W0gkjjE>  
Our thanks to the **Amsat News Service** for this link

## Soldering Is Easy - The Comic Book

April 25, 2011

This comic book aims to encourage more people to get soldering.



The description of the comic says: Soldering is easy, and with this comic we hope to show just how easy.

Please use this to learn how to solder, to teach others, or as material for workshops and hackerspaces!

The PDF can be downloaded from Andie Nordgren's website at <http://log.andie.se/post/4529161438/soldering-is-easy-the-comic-book>

Andie used to live and tinker at the Shoreditch Hacker House in London

<http://theshh.org/>

London Hackspace

<http://london.hackspace.org.uk/>

## Radio Hams On Endeavour's Final Flight

Friday, April 29, 2011

Radio Amateurs Greg Chamitoff KD5PKZ, Mike Fincke KE5AIT and Robert Vittori IZ6ERU will be on the Space Shuttle **Endeavour** when it blasts off today April 29 at 19:47 UT.



Pictured clockwise in the STS-134 crew portrait are NASA astronauts Mark Kelly (bottom center), commander; Gregory H. Johnson, pilot; Michael Fincke – KE5AIT, Greg Chamitoff – KD5PKZ, Andrew Feustel and European Space Agency's Roberto Vittori – IZ6ERU, all mission specialists. Image credit: NASA

The launch will be broadcast on NASA TV.

During the 14-day mission, Endeavour will deliver the Alpha Magnetic Spectrometer (AMS) and spare parts including two S-band communications antennas, a high-pressure gas tank and additional spare parts for Dextre. This will be the 36th shuttle mission to the International Space Station.

The commander of Endeavour is Mark E. Kelly, husband of Congresswoman Gabrielle Giffords who in January was shot in the head in an assassination attempt.

NASA TV <http://www.nasa.gov/multimedia/nasatv/>  
NASA - STS-134: Endeavour  
[http://www.nasa.gov/externalflash/134\\_flash/](http://www.nasa.gov/externalflash/134_flash/)  
NASA Podcast - STS-134: What's Going Up  
<http://www.nasa.gov/multimedia/podcasting/whatsgoingupsts134.html>

Assassination attempt on spouse of STS-134 Commander

[http://www.southgatearc.org/news/january2011/tucson\\_shooting.htm](http://www.southgatearc.org/news/january2011/tucson_shooting.htm)

## Endeavour's launch postponed

Saturday, April 30, 2011

NASA managers met Friday to discuss the status of space shuttle Endeavour's launch to the International Space Station.

The launch was postponed because of a heater issue associated with the shuttle's hydraulic power system.

The next launch attempt will be no earlier than May 2.

The shuttle has three Auxiliary Power Units (APUs) that provide hydraulic power to steer the vehicle during ascent and entry. NASA launch commit criteria and flight rules require all three APUs to be fully operational for launch.

Endeavour's external fuel tank was drained of more than 500,000 gallons of liquid hydrogen and

oxygen so engineers can access the area Saturday and evaluate the issue with APU 1.

For the latest information about the STS-134 mission and its crew, visit: <http://www.nasa.gov/shuttle>

For information about the International Space Station, visit: <http://www.nasa.gov/station>

Radio Hams on Endeavour's final flight [http://www.southgatearc.org/news/april2011/hams\\_on\\_last\\_shuttle\\_flight.htm](http://www.southgatearc.org/news/april2011/hams_on_last_shuttle_flight.htm)

## Space Shuttle Endeavour to Launch No Earlier Than May 16

May 6, 2011

NASA managers have retargeted space shuttle Endeavour's launch to no earlier than Monday, May 16. After a meeting on Friday, they also extended the length of Endeavour's STS-134



mission to the International Space Station from 14 to 16 days. If Endeavour launches on May 16, liftoff would be at 8:56 a.m. EDT.

At 3 p.m. on Monday, May 9, NASA Space Shuttle Program Launch Integration Manager Mike Moses and Shuttle Launch Director Mike Leinbach will hold a news conference at Kennedy Space Center in Florida to discuss the progress of repairs since Endeavour's launch postponement on April 29. The news conference will air live on NASA Television and online at [www.nasa.gov/ntv](http://www.nasa.gov/ntv).

Kennedy technicians are continuing work to resolve an issue in a heater circuit associated with Endeavour's hydraulic system that resulted in the launch postponement. Technicians determined the failure was inside an aft load control assembly, which is a switchbox in the shuttle's aft

compartment, and possibly its associated electrical wiring.

Although the root cause of the failure in the switchbox has not been found, technicians are replacing hardware that could have caused the problem. The faulty box was changed Wednesday, and a test of nine shuttle systems powered by the new box is under way.

This weekend, technicians will install and check out new wiring that bypasses the suspect electrical wiring connecting the switchbox to the heaters. They also will run the heaters for up to 30 minutes to verify they are working properly and complete retesting of the other systems powered by the switchbox.

The shuttle has three Auxiliary Power Units (APUs) that provide hydraulic power to steer the vehicle during ascent and entry. The hydrazine fuel lines on each APU have two heater circuits that prevent the fuel from freezing while the shuttle is in space. NASA launch commit criteria and flight rules require all APUs and heater circuits to be operational for launch. On Endeavour's first launch attempt, one of two heaters for APU-1's fuel line did not work. Engineers confirmed the circuit in the original switchbox that directed power to the heaters was shorted out.

Launch attempts are available through May 26. May 21 is the only day a launch is not an option because it would lead to a May 23 docking with the space station. May 23 is when three of the space station's Expedition 27 crew members undock and

return home in their Soyuz spacecraft. Managers reviewed the STS-134 mission timeline and determined the Endeavour crew can accomplish all objectives even with the departure of the three station crew members.

## 50th Anniversary Of 1st American In Space

May 5, 2011

May 5, was the 50th anniversary of Alan Shepard's historic journey into space in Freedom 7.

His space flight was the first to meet the then FAI requirements to qualify as a world record.

Alan Shepard's flight clocked up a number of firsts.

He was the first person to reach space and land in the same vehicle that he took-off in. Yuri Gagarin did not land in his capsule, instead he jumped out and landed by parachute. The Soviets kept details of his landing secret for many years because under the then FAI regulations, the flight would only qualify as a world record if the pilot stayed inside the capsule all the way to touchdown.

Alan Shepard was also the first to have some control of the spacecraft, Yuri Gagarin's flight was on auto-pilot. The launch and recovery by helicopter were televised live, another first.

Later in 1971, Alan Shepard commanded Apollo 14 and famously played golf on the Moon with a six iron, the second of his shots going as he said for "miles and miles and miles".

On the AMSAT bulletin board John Papay K8YSE wrote about Alan Shepard's historic space flight. You can read his post at: <http://www.amsat.org/amsat/archive/amsat-bb/48hour/msg86175.html>

It wasn't until May 18, 1991, 30 years after Alan Shepard's historic flight, that an astronaut from the United Kingdom, Helen Sharman GB1MIR, travelled into space on her flight to the MIR space station.



Watch NASA video - Golf on the Moon at <http://www.youtube.com/watch?v=KZLI3XwIAIE>

## Girl, 8, Parents Band Together As Ham Radio Operators

By Mark Harper, The Daytona Beach News-Journal Staff Writer

April 1, 2011



DELTONA -- Mikaila Williams is a whiz at her schoolwork. She loves her pet hamster Summer, who she says has "g-force" because of her ability to escape her cage.

Mikaila loves to read. Her favorite book so far: "Heidi," although she pronounces it "Heady."

She's every bit of 8 years old.

And she's a newly licensed amateur radio technician.

Mikaila's mother, Jen, and stepfather Ron Fetters are ham radio operators, so she has seen how the 100-year-old technology has remained valuable and relevant, even in this age of smartphones and social networking.

And Mikaila -- who's not yet on Facebook or Twitter -- says she wants to be helpful.

So she studied for her technician's license, passing an exam that covered such topics as radio frequency signals, the velocity of radio waves and antenna installation. One question from a sample test: "What electrical component is used to connect or disconnect electrical circuits?" (Possible answers: variable resistor, switch, inductor or Zener diode.)

And last week, at first crack, she passed. "I only missed three (questions)," she said. "I could have missed nine (and still passed)."

This week, she received her license in the mail.

Her call letters are KK4BFB. That's kilo, kilo, 4, bravo, foxtrot, kilo, in radiospeak.

Having earned her technician class license, she is now studying for the next step up, the general class, which would, under Federal Communications Commission rules, allow her privileges below 50 MHz and global HF (or shortwave) communications.

About 700,000 people hold FCC amateur radio licenses, according to Allen Pitts, media and public relations manager for the American Radio Relay League. Regionally, she is believed to be the

youngest ham operator around, although Pitts said he heard about license holders as young as 6.

The number of ham radio operators has grown in recent years for two reasons, Pitts said. In 2007, the FCC dropped a requirement for operators to know Morse code. Also, several recent events -- including the attacks of Sept. 11, 2001, and Hurricane Katrina in 2005 -- drew interest in amateur radio's capacity to help during a disaster.

Mikaila said she's heard stories about how amateur radio operators have helped save lives in Japan following the tsunami that has killed more than 10,000 people.

The home-schooled blond girl who says she wants to help isn't always concerned with worldwide disasters. Asked what she likes about Florida, where she moved from Oklahoma about seven months ago, she replied: "I love the beach. I love the woods. I love the sunny days. Hate the rainy days. I like sea animals."

If she gets her general license, she'll be able to use the shortwave radio in her parents' basement to communicate with ham operators all over the world. She likes that idea.

"I think that's pretty cool," she said.

## Ham Radio Responds To Tornado Outbreak

April 29 2011

Massive tornadoes cut a streak of destruction across the Southern tier of the United States on Wednesday, April 27th. The twisters killed at least 250 people in six states and destroyed countless homes and businesses in their wake. Alabama's state emergency management agency said it had confirmed 162 deaths, while there were 33 in Mississippi, 33 in Tennessee, 14 in Georgia, eight in Virginia and one in Kentucky. In many areas all normal means of communications was lost.

Two of Alabama's major cities were among the places devastated by the deadliest twister outbreak in nearly 40 years. Police and other first responder radio systems fell silent when winds in excess of 120 miles per hour ripped antennas off buildings and felled towers. But the storms did not silence ham radio.

As we go to air, a group of hams is reportedly assisting in restoring emergency communications in the city of Tuscaloosa where the entire emergency communications system was wiped out by a

tornado. It was only through reports filed by radio amateurs that first responders began to learn the magnitude of the devastation to that city.

Meantime in Pell City about 30 miles east of Birmingham, the Emergency Operations Center lost all of its antennas to high winds. Amateur Radio operators from ARES were dispatched to that E-O-C where at last report they were still providing communications support to the storm ravaged area. Similar scenarios were being played out in Arkansas, Kentucky, Mississippi, Missouri and North Carolina as severe weather hit those areas as well.

A spokesman for the National Weather Service's Storm Prediction Center in Norman, Oklahoma said it received 137 tornado reports into Wednesday night. An expert at the center said it appears some of the tornadoes were as wide as a mile and likely packed a wallop that only 1 in 100 storms ever reach. It will be days, however, before scientists make an official determination.

(Various news sources)

## A Happy 220 To Samuel F. B. Morse

April 29 2011

And a very happy 220th birthday to Samuel F. B. Morse, who introduced telegraph communications in the United States.

Morse was born on April 27th 1791 in Charlestown, Massachusetts. On 24th of May 1844, he famously sent the message "What hath God wrought" by telegraph from Washington D.C to Baltimore, Maryland and there-by ushering in the electronic

information age that has continued to grow and become the world-wide broadband systems of today.

But the telegraph Morse code used in Morse's days differed in a number of respects from the International Morse code used in later times. A description of the differences can be found at [tinyurl.com/4e9mxk](http://tinyurl.com/4e9mxk) (Southgate)

## Emerging Technology: Making LEDs The All Purpose Room Light

April 29, 2011

New technology may make Light Emitting Diodes practical for everyday home and even hamshack.

Researchers at the University of California, Santa Barbara, say they've figured out the cause of a problem that's made light-emitting diodes impractical for general lighting purposes.

Chris Van de Walle is a professor in the Materials Department at the University of California at Santa Barbara. He heads the research group that carried out the work. They investigated a phenomenon referred to as the drop in efficiency that occurs in these LEDs when they're operating at the high

powers required to illuminate a room. The cause of this decline has been the subject of considerable debate, but the UC Santa Barbara researchers say they've figured out the mechanism responsible for the effect by performing quantum-mechanical calculations.

Van de Walle says that identifying the root cause of the problem was an indispensable first step toward devising solutions.

More is on-line at [tinyurl.com/3ey7fuc](http://tinyurl.com/3ey7fuc) (Science OnLine)

## Send Your Name And Call To Mars

April 29, 2011

There may not be any ham radio station on the planet Mars, but there may soon be a lot of ham radio callsigns making their way across the surface of the red planet.



Artist Concept of the Mars Science Laboratory Rover

NASA is collecting names to be put on a microchip that'll be onboard the Mars Science Laboratory rover heading to Mars in the fall of 2011. Some Radio Amateurs have been adding their call sign to

last name field. As well as having your call sign traveling around the Martian surface you also get a electronic commemorative certificate to print out.

The rover has an unusual connection with radio. As previously reported here on Amateur Radio Newline, this second generation rover has special indentations on its wheels that will spell out the initials JPL in Morse as it travels around Mars. And for the few of you who might not be aware. JPL stands for Jet Propulsion Laboratory located in Pasadena, California, which is the NASA branch that builds the rovers.

You can add your name and call on the Mars microchip at [tinyurl.com/marsham](http://tinyurl.com/marsham). From what we are hearing, a whole bunch of hams already have.

More on the Mars Science Laboratory project can be found at [mars.jpl.nasa.gov/msl/](http://mars.jpl.nasa.gov/msl/). (NASA)

## FCC Issues Split Decision On Challenges To Recon Robotics Using 70 Cm Ham Band

April 22, 2011

Call this one a draw so far on for ham radio. This as the FCC has given radio amateurs a partial victory and a partial defeat in response to a challenge by members of the Amateur Radio Service and its national society. This, to an FCC waiver permitting ReconRobotics, Inc. to domestically operate its surveillance robot called the Recon Scout in the shared 70 centimeter amateur band.



The FCC has denied several requests from the ham radio community, including an ARRL Petition for Reconsideration, of a rules waiver that permits the certification and licensing of the Recon Scout. This, to operate in the 430 to 448 MHz band.

In an Order on Reconsideration released on April 15, the FCC said that it found objections to use of 430 to 448 MHz as being unfounded. This based on the nature of the device, the way in which it must be sold and deployed, and that no other spectrum is as suitable for its operation.

In relation to the latter, the regulatory agency noted that operation of the Recon Scout in the 900 MHz band or high would require increased transmit power while still not guaranteeing the same quality of surveillance as afforded by operation on 70 centimeters. It also noted that the Recon Scout waiver states that these devices may not interfere with federal or non-federal stations operating from 420 to 450 MHz and those agencies using the

Recon Scout must accept any interference received from all other spectrum users. In other words, as applied to ham radio operations, its users could not complain to the FCC if it received interference from any Amateur Service operations, but hams could complain if they were interfered with by operation of a Recon Scout.

On the plus side, the FCC did grant a request from the ARRL for changes in the labeling and instruction manual requirements of the Recon Scout. This, to insure that users of the device are aware of its limitations in regard to interference to its operation. As a result, Recon Scout transmitters delivered after April 15th are required to carry a warning on its product label and in its instruction manual basically stating that the Recon Scout must accept any interference received from federal or non-federal stations, including interference that may cause undesired operation.

The FCC Order also acknowledged that the ARRL was correct in arguing that the waiver was insufficient in that it did not waive applicable provisions of Section 2.106 of the Commission's Rules, which contains the Table of Allocations of frequency bands to the various radio services. The Commission's solution was to retroactively waive the Table of Allocations to the extent necessary to permit distribution and use of the Recon Scout.

For those not aware, ReconRobotics bills itself as a world leader in tactical robotic systems. It claims that more than 1,200 of the company's robots have been deployed world-wide by the U.S. military and international friendly forces, federal, state and local law enforcement agencies, bomb squads and fire rescue teams. More about the company is on-line at [www.reconrobotics.com](http://www.reconrobotics.com). (FCC)

## UK Hams Set New Optical Communications Record

April 15, 2011

A new record has been set for optical communications by a group of British hams.

On 3rd April a new distance record set for optical communication by a group of radio amateurs from North-East England.

The distance worked was just a few meters short of 90km. Signals were exchanged on FM and SSB at remarkable strengths.

The contact was made from Race Head in County Durham, which is locator IO94VS to Danby Moor near Whitby, which is locator IO84NK.

The team at Race Head included two stations, Stuart, G8CYW running the transverter and LED transceiver of his design featured in recent articles in RadCom, and Brian, G8KPD also running his version of the designs, plus separate receive and transmit heads. The station on Danby Moor was

operated by Rob, M0DTS using his version of the transverter featured in RadCom.

Truly a ham radio record that you had to have been there to see. (GB2RS)

## **UK Light Communications Distance Record Challenged**

April 22, 2011

The optical distance record claimed in the U-K may not be a record after all.

Since our light communications record claim story aired on last week's newscast, we have received numerous e-mails and even a few phone calls that say the accomplishment in the U-K falls far short of other claimed distances set in elsewhere around the globe. In fact, the number of such claims far outweighs the space we have available to report them all.

But as pointed out by one of our listeners, the 90 kilometer distance claimed in the U-K is only about 56 miles and there are a number of well-documented communications over longer distances. This includes one as early as 1962 in southern California. Another listener points out a more recent accomplishment over a 173 mile path.

But as another of our listeners also points out, there is really no official record-keeper of optical distance records. At least not here in the United States. This he says is partly because until very

recently, the ARRL did not recognize non-coherent communications for contest purposes. Also, since the FCC does not claim to regulate communications above 400 GHz, some might question whether a QSO that does not require a license is really an amateur radio contact at all.

But the 90 kilometer contact we reported last week took place in the United Kingdom, and the way that light communications distance records are looked upon over there may be quite different than the way they are viewed on this side of the Atlantic, or the way that they are viewed elsewhere in the world.

The bottom line: If hams are going to lay claim to optical distance records, then what is needed is an organization respected and accepted by all of the worlds ham radio community to corroborate any claims made, and to declare who has set a valid record and who has not. (ARNewsline from listener input)

# LONDON AMATEUR RADIO CLUB

34rd ANNUAL  
2011 FLEA MARKET

SUNDAY, SEPT. 25th  
9.00 AM TO 1.00 PM

**VENDOR SETUP: 7:30 AM**

**\*BOOK EARLY AND SAVE ON ADMISSION\***

ADMISSION: \$6.00, (Age 10 and up)

TABLES: \$ 10.00



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Phone: (519) 455-9465 (Ruth)

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(not to Ruth Dahl) and mail to:  
Ruth Dahl VE3RBO  
Apt #805 700 Wonderland Rd N  
London ON N6H 4V3

# **MEMBERSHIP INVITATION**

*-- Membership application and dues are currently requested.*

*Our term of membership runs from October 1 to September 30 of the following year. Each and every year it is increasingly more difficult to get Amateurs to commit to membership in their local club due to the alternate functions we are asked to fund.*

*The **London Amateur Radio Club** has a long history of providing technical support, social support and repeater facilities. Public service efforts are currently provided by a club affiliation with Amateur Radio Emergency Services (**ARES**) and **Radio Amateurs of Canada (RAC)**.*

*Your Directors work tirelessly to provide meeting topics that are informative and entertaining, events that are timely (Christmas meeting, field day, bus trip) and participate in events that display and promote Amateur Radio in the community.*

*To be effective in its pursuits, the Club needs the support of the local Amateur fraternity through membership.*

*While we obtain financial support from our Annual Flea Market, we require membership support to fund such things as meeting hall rent, repeater sites rent and maintenance, web site fees, membership cards and liability insurance. For what it's worth, none of these things are getting any cheaper.*

*The cost of membership has not changed for a number of years and even in the face of increased cost, we would like to keep it that way.*

*With more than 1000 'hams' in the London area, it's inconceivable that less than 10% support a pastime about which most of us are passionate.*

**PLEASE**, make a choice and do your part to keep the **London Amateur Radio Club** alive and well by purchasing your membership at our next meeting (or by mail – details on our web site). The cost is still only \$25.00 (single) or \$30.00 (family residing at the same address).



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<input type="checkbox"/> Needed <input type="checkbox"/> Rec'd	
Sticker	
<input type="checkbox"/> Needed <input type="checkbox"/> Rec'd	

**LONDON AMATEUR RADIO CLUB INC.  
MEMBERSHIP APPLICATION**

PLEASE PRINT

SINGLE MEMBERSHIP: \$25.00       RENEWAL  
 FAMILY MEMBERSHIP: \$30.00       NEW MEMBER

---

Member # 1	Last Name	First Name	Call Sign
	_____	_____	_____
	RAC Member?	RAC Member #	ARES Volunteer? Email Address
	<input type="checkbox"/> No <input type="checkbox"/> Yes	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No _____

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Member # 2	Last Name	First Name	Call Sign
	_____	_____	_____
	RAC Member?	RAC Member #	ARES Volunteer? Email Address
	<input type="checkbox"/> No <input type="checkbox"/> Yes	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No _____

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Member # 3	Last Name	First Name	Call Sign
	_____	_____	_____
	RAC Member?	RAC Member #	ARES Volunteer? Email Address
	<input type="checkbox"/> No <input type="checkbox"/> Yes	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No _____

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Member # 4	Last Name	First Name	Call Sign
	_____	_____	_____
	RAC Member?	RAC Member #	ARES Volunteer? Email Address
	<input type="checkbox"/> No <input type="checkbox"/> Yes	_____	<input type="checkbox"/> Yes <input type="checkbox"/> No _____

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Address: \_\_\_\_\_

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\_\_\_\_\_ Phone Number

Date: \_\_\_\_\_

*All information requested should be completed - this will be used for the club's membership database only.  
All LARC membership information is held in strict confidence.*

Please make cheque payable to: **London Amateur Radio Club Inc.**

Mailing Address: London Amateur Radio Club  
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London, Ontario, N6A 4V3